

## **Abstract**

The present invention relates to a method of inducing an immune response to a parasite utilizing an immunogenic composition comprising a glycosylphosphatidylinositol ("GPI") inositolglycan domain or its derivative or equivalent. The present invention is useful as a prophylactic and/or therapeutic treatment for microorganism infections of mammals such as parasite infections and particularly infection by Plasmodium species. The invention also provides a method of monitoring, or qualitatively or quantitatively assessing an immune response to a microorganism such as a parasite. More particularly, this aspect of the present invention is directed to assessing said immune response utilizing a GPI inositolglycan domain or its derivative or equivalent, which facilitates the qualitative and/or quantitative analysis of anti-GPI antibodies in a biological sample, the identification of unique specificities of antibodies, epitope specific screening or the rational design of immunogenic molecules and the generation, thereby, of functionally effective immunointeractive molecules.